theory of system each object v

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AI Overview

Treating every object in a system as an autonomous unit with its own Robot Framework or processing engine combines object-oriented design with multi-agent system theory. In this model, objects encapsulate state, behavior, and self-automation capabilities to interact seamlessly across a distributed architecture. Robot Framework +4

Core Principles of Object-Centric Automation

- **Encapsulation of Behavior:** Each object holds its own set of rules, properties, and execution keywords rather than relying entirely on a centralized controller.
- **Autonomous Processing:** Objects sense their local environment, process internal logic, and trigger automated actions independently.
- **Decoupled Communication:** Objects pass messages or events to one another to synchronize workflows without tight coupling. National Institutes of Hea… +4

System Integration and Execution

- **Keyword-Driven Interfaces:** Individual objects expose standardized commands that external entities or peer objects can invoke.
- **Modular Libraries:** Functionality scales outward as new objects bring their own specialized processing libraries into the broader ecosystem.
- **Distributed Orchestration:** System-wide processes emerge from the localized cooperation of multiple autonomous object-engines. Robot Framework +2

If you would like to proceed, please specify:

- Whether you are designing a **software architecture**, an **industrial IoT system**, or a **business process model**
- The **communication protocol** or language (like Python) you want the objects to use

I can help map out a concrete structural blueprint for your system.

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